

# St. Bartholomew's Hospital



"Æquam memento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

VOL. XLII.—No. 2.]

NOVEMBER 1ST, 1934.

PRICE NINEPENCE.

### CALENDAR.

Fri., Nov. 2.—Lord Horder and Sir Charles Gordon-Watson on duty.  
Medicine : Clinical Lecture by Lord Horder.

Sat., , 3.—Rugby Match v. Rugby. Away.  
Association Match v. Balliol College, Oxford. Home.  
Hockey Match v. University College. Away.

Mon., , 5.—Special Subjects : Lecture by Mr. Sydney Scott.

Tues., , 6.—Dr. Gow and Mr. Girling Ball on duty.

Wed., , 7.—Surgery : Clinical Lecture by Mr. Wilson.  
Rugby Match v. Army Trial XV. Home.

Thurs., , 8.—Students' Union. Annual Dance. Grosvenor House.

Fri., , 9.—Dr. Graham and Mr. Roberts on duty.  
Medicine : Clinical Lecture by Lord Horder.

Sat., , 10.—Rugby Match v. Pontypool. Home.  
Hockey Match v. Worcester College, Oxford. Home.

Mon., , 12.—Special Subjects : Lecture by Mr. Higgs.

Tues., , 13.—Prof. Fraser and Prof. Gask on duty.

Wed., , 14.—Surgery : Clinical Lecture by Sir Charles Gordon-Watson.

Thurs., , 15.—**Abernethian Society : Inaugural Address by Dr. J. A. Ryle—"The Hippocratic Ideal."**

Fri., , 16.—Lord Horder and Sir Charles Gordon-Watson on duty.  
Medicine : Clinical Lecture by Dr. Hinds Howell.

Sat., , 17.—Rugby Match v. Moseley. Home.  
Association Match v. Lancing Old Boys. Home.  
Hockey Match v. Tulse Hill II. Home.

Mon., , 19.—Special Subjects : Lecture by Mr. Sydney Scott.  
**Last day for receiving matter for the December issue of the Journal.**

Tues., , 20.—Dr. Hinds Howell and Mr. Harold Wilson on duty.

Wed., , 21.—Surgery : Clinical Lecture by Mr. Girling Ball.  
Rugby Match v. R.M.A. Home.

Fri., , 23.—Dr. Gow and Mr. Girling Ball on duty.  
Medicine : Clinical Lecture by Dr. Gow.

Sat., , 24.—Rugby Match v. Devonport Services. Away.  
Association Match v. London Welsh. Home.  
Hockey Match v. Emmanuel College, Cambridge. Away.

Mon., , 26.—Special Subjects : Lecture by Dr. Cumberbatch.  
Rugby Match v. R.N.E.C. Keyham. Away.

Tues., , 27.—Dr. Graham and Mr. Roberts on duty.

Wed., , 28.—Surgery : Clinical Lecture by Mr. Girling Ball.

Fri., , 30.—Prof. Fraser and Prof. Gask on duty.

### EDITORIAL.



HE appeal for funds to equip the Charterhouse as a new Medical School has just entered on its second year. Few of those associated with the Hospital can still remain ignorant of the urgent need to provide new and better accommodation for the preclinical departments. The majority long since will have perceived the great advantages of the change, and will have seen for themselves the site and its abundant possibilities.

At this stage the Appeal is in that dangerous period when energy tends to tire on account of failing enthusiasm and in spite of the unflagging zeal of those who are its main inspiration. Such an attitude at this juncture would be fatal to the success of the project, for the Appeal has now passed from the privacy of the Hospital walls to the publicity of the great City. Those outside must be awakened to the urgent need of the Hospital, the City and the nation for a supply in the future of efficient, well-trained medical men. The most promising of raw materials is wasted in a poor workshop, and a leading medical school in a country with such high standards of education as this must not fall short of the best. On a recent visit to a continental medical school we were greatly impressed by the excellent modern equipment of the lecture theatres and laboratories, and comparisons were by no means favourable to the present state of those at this College.

Over half of the sum required to pay off the purchase price of the Merchant Taylors' School site has now been collected. A further sum is also required—£40,000—to equip the existing School and £30,000 to build and equip a residential block. It is hoped to obtain £20,000 for the buildings at present in use in Giltspur Street. The need is indeed great and, though the times are inimical to money appeals, the harvest is ready. The

potential reapers are many—about one thousand within the Hospital and more than five times that number scattered throughout this country and the Empire. The time is short, very short, for the change must have taken place by the autumn session of next year.

That the field of activity has been extended does not reduce but rather augments the personal responsibility of those belonging to St. Bartholomew's. Of past students, many, but by no means the majority, have given of their ability; for example, only a single county has contributed a full quota. The present student body has helped in a very real way, but again the subscription list requires many names before there is a concrete indication of a universal desire to benefit posterity. Lack of support in any individual case surely cannot be due to deliberate withholding, but rather to a mild but dangerous apathy or to the whisperings of old Thief Procrastination. As we ourselves have been inspired by the enthusiasm of the Dean and his co-workers, so may the public find in the friends of the Hospital an incentive to material action. A muddy spring gives a muddy stream, and apathy at the source of this great Appeal will certainly embarrass its success.

Nothing great was ever achieved without enthusiasm; we are therefore confident that all Bart.'s men and women will give of their best.

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The Sub-Dean has kindly furnished the following information concerning the new "B.G.T." scheme.

Last month this Journal gave a short notice of a new arrangement in the Medical College which may have very far-reaching results. It had become possible, for the first time, for Bart.'s men to attend clinical lectures at Guy's and St. Thomas's Hospitals. During recent weeks the notices of these lectures have been appearing on our screens, and those whose clinical appointments have allowed them the time have been welcome at the other two schools. St. Thomas's and Guy's men have had similar facilities to attend clinical lectures here. This is the first manifestation of the new scheme for closer co-operation in teaching at the three schools. It needs very little imagination to realize how far the development of the scheme might take us. If the experiment is successful, the whole system of medical education in London may be altered for the better.

However good the underlying idea in these innovations may be, its application to the established and well-tried system of education must be tentative and rather gradual. For this reason the number of medical schools involved is limited for the present to three. Difficulties in preliminary organization mount in geometrical progression with the number of independent bodies concerned. For the same reason it may be necessary to abandon some projects and substitute others. Any such modifications, if indeed they take place, are not to be taken as signs of failure of the scheme, but rather as valuable negative data to be used in building a durable structure.

The sharing of clinical lectures is not the only form of co-operation that has so far been agreed upon. Arrangements are well advanced for some exchange of ward teaching. To anyone familiar with the crowded ward rounds in this Hospital alone, it is clear that indiscriminate mutual hospitality in this respect would not serve any good purpose. It is therefore proposed that a limited number of men from St. Thomas's shall be invited to one medical and one surgical round each month, and that a limited number of Bart.'s men shall be invited similarly to St. Thomas's. This seems very little to shout about, unless it is realized that it is not going to be an easy matter to find a method of sharing the clinical teaching that does not upset the balance that exists at present. Opportunities of

attending ward rounds at the other two hospitals will be materially increased when experience has shown how the small-scale model works.

The other activities in which the three schools are uniting their resources are the Primary Fellowship course and facilities for those who are working for the M.R.C.P. In neither case are the details complete. The advantages of a Primary course in which the teachers of all three schools take a part are as obvious as the difficulties in finding a time-table to suit everybody. The woes of the would-be candidate for the membership are very ancient history. Perhaps they may be alleviated if a course can be started which provides clinical work at all three hospitals during a period of twelve weeks.

The organization set up to look after the combined activities of the three schools is a joint sub-committee. Each school sends five members, one of whom is its Dean. Regular meetings are held. The sub-committee will do all in their power to give practical shape to this ideal of co-operation of the medical schools of London. Their work will be immensely simplified by the intelligent help of the student bodies of the three hospitals immediately concerned. Such help can be given by an observant trial of the new opportunities for interchange as they become available, and by comment on the apparent advantages or disadvantages of each. Most of all there is needed a sympathetic understanding of the problems involved. With this help the experiment now just starting must inevitably be a success.

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The Banquet at the Mansion House arranged in connection with the College Appeal has been cancelled for the present.

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The vacancies created by the resignation of Prof. Fraser and Prof. Kettle have been filled by Dr. L. J. Witts and Prof. Geoffrey Hadfield respectively.

Dr. Leslie John Witts has been Assistant Physician at Guy's Hospital. He qualified from Manchester University, obtaining M.B., B.Ch. with 1st Class Honours in 1923. He received the Doctorate in 1926, and was made a Fellow of the Royal College of Physicians in 1931.

In 1926 he was the John Lucas Walker Student in Pathology at the University of Cambridge. He was for a time Assistant to the Medical Unit at the London Hospital. His published work hitherto has been concerned mainly with diabetes and with the anaemias.

Prof. Geoffrey Hadfield has been Professor of Pathology in the University of Bristol since 1933. He was a student at St. Bartholomew's, graduating in 1911 and obtaining the M.D. (Gold Medal) in 1913. Since 1914 he has been teaching pathology in various capacities. During the war he was a Captain in the R.A.M.C., specializing in pathology for five years, and served for three years in Gallipoli and France. Before going to Bristol he lectured on the subject at the Royal Free Hospital. His interests are varied. He collaborates with Dr. L. P. Garrod in the excellent *Recent Advances in Pathology*, and he has written on the pathology of the nervous system, of tumours and of cardiac infections.

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Many activities of the Hospital's organization are not apparent to the casual observer, but are none the less essential to the patient's well-being. Few, however, can have failed to notice an inobtrusive trolley-load of books being wheeled across the Square or from bed to bed in the wards. The following has been received from the Honorary Head Librarian and deserves the interest of all. Superfluous books, even of the good quality required here, are a feature of every household and will be welcomed at the Library, in the entrance of the New Surgical Block :

The British Red Cross Hospital Library was started at this Hospital two and a half years ago. Headquarters presented 250 books at the beginning, but it now possesses over 2000. These have been collected by the Librarian and patients. At present there are eight Hon. Librarians, and two ladies come weekly to repair the books. Twenty-three wards are visited each week, and every patient is offered a wide choice of books and may borrow as many as required. During the last ten months 18,853 books have been borrowed by the patients.

The Library is always in need of books of all descriptions, provided that they are in good condition, as the wear is very great. Besides fiction, there is a constant demand for books of travel, biography, sport and popular science and for foreign books.

Headquarters have made this branch a training and demonstration library, and since the summer the new head Librarians for St. Thomas's and the L.C.C. Hospital at Shoreditch have been trained here.

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Attention of all Bart.'s men and their friends living in or near London is drawn to the Children's Fair to be held at the Langham Hotel on Saturday, November 24th. The Lady Patricia Ramsay has graciously consented to open the Fair at 3 o'clock. Many of the London Hospitals hold similar functions, but this is the first occasion that a Children's Fair has been arranged in connection with St. Bartholomew's. The Fair has been organized by the Women's Guild, and the proceeds are to be given to the funds of the Guild.

The attractions include an entertainment given by the pupils of Italia Conti, a Punch and Judy show, side-shows, and circus items contributed by Mr. S. Furber and some students. There are to be stalls at which can be bought Christmas presents, dolls, games, toys, Christmas crackers, sweets, nursery requisites, and cakes and produce.

The tickets are only 2s. 6d., which includes tea. They can be bought from the Langham Hotel or from members of the Committee, headed by Mrs. Girling Ball, Mrs. Barris, Mrs. Gask and Mrs. Hinds Howell.

The decorations and posters\* are being done by Miss Mary Shepard, the artist daughter of Mr. Ernest Shepard.

Contributions of toys or money towards expenses will be gratefully accepted. The wives of Bart.'s men are urged to come and to bring their families, and to tell their friends about it.

The Fair will be an ideal way of giving a children's party. Tables for tea can be booked for parties on application to Mrs. Barris.

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The Bart.'s Cambridge Dinner is to be held at the Mayfair Hotel on the evening of Wednesday, November 21st. Prof. Fraser will be in the Chair. This will be an excellent opportunity for Cambridge men to show their appreciation of the splendid work that the Professor has done for Bart.'s. It is hoped that members will turn up in record numbers.

\* One of these appears on p. v in this issue.

Students are again reminded that a course of lectures in Scientific German is being given by Mr. FitzAucher on Fridays at 5.30 p.m.

The opportunity is an excellent one, for the language is more than a luxury in the education of every medical man.

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At the November meeting of the Paget Club Mr. McAdam Eccles introduced as an honorary member the Rt. Rev. Luke Paget, late Bishop of Chester, and the third son of Sir James Paget. A paper was read by Dr. R. G. Macfarlane on the treatment of haemorrhage with dilute snake venom, with particular application to haemophilia. Venom was withdrawn from a Russell's viper by Dr. Burgess Barnett, Curator of Reptiles at the London Zoo, with whose help the research had been undertaken. After having been dried for storage, gauze soaked in a greatly diluted solution had been found to arrest haemorrhage in a very few seconds. It had been tested clinically in dental extraction, tonsillectomy and abdominal operations, on normal patients and on haemophiliacs with gratifying success, arresting the most obstinate bleeding or capillary oozing. Remarks on the discovery were made by Sir Chalmers Mitchell, Sir Leonard Rogers and Professor Gask.

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The following gentlemen have been nominated to House Appointments from November 1st, 1934 :

*Junior House Physicians*—

Lord Horder . . . . .	Darmady, E. M.
Prof. Fraser . . . . .	Avery Jones, F.
Dr. Hinds Howell . . . . .	Martin Jones, J. D.
Dr. Gow . . . . .	Latter, K. A.
Dr. Graham . . . . .	Gale, H. E. D.

*Junior House Surgeons*—

Prof. G. E. Gask . . . . .	Benison, R. L.
Sir C. Gordon-Watson . . . . .	Harris, E. E.
Mr. Harold Wilson . . . . .	Innes, A.
Mr. Girling Ball . . . . .	Blusger, I. N.
Mr. J. E. H. Roberts . . . . .	Kingdon, J. R.

*Intern Midwifery Assistant (Resident)*

*Intern Midwifery Assistant (Non-Resident)*

Extern Midwifery Assistant . . . . .	{ Livingstone, F. D. M. (Nov.).
	Martin, K. W. (Feb.).

*H.S. to Throat and Ear Department*

*Junior H.S. to Throat and Ear Department*

*H.S. to Ophthalmic Department*

*H.S. to Skin and Venereal Departments (Non-resident)*

*H.S. to Orthopaedic Department*

*H.P. to Children's Department*

*H.S. to Dental Department*

*Junior Resident Anæsthetists*

*Non-Resident Anæsthetist*

*Casualty House Physicians*

*Casualty House Surgeons*

*Levick, R. E. K. (Nov.).*

*Daniel, T. M. (Feb.).*

*Purnell, R. H. } (Nov.).*

*Hulbert, N. G. }*

*MacCarthy, D. }*

*Sheehan, D. J. }*

*Reavill, D. C. }*

## THE COLLEGE APPEAL.

HE appeal is now well started on the second stage of its career. Until a few weeks ago, when the Lord Mayor sent out his letter to the business men and organizations of the City, the appeal was more or less a family affair. It was directed at those who are in some way or another connected with the Medical College. Since the Lord Mayor's letter went out the appeal has entered a wider field. With its increased scope a new set of circumstances have to be faced, so that it may be pushed forward in the most effective manner. So many people have been drawn into its orbit that its progress must be a matter of general interest to all those connected with the Hospital.

Consideration of current activities can start with a retrospect. The success of the appeal during the "family" phases augurs well for the future. Up to the time of the Lord Mayor's letter, a sum of no less than £65,000 had become available for the Medical College, and this was contributed or collected by Bart.'s men and women, working as a private organization. The confidence which this effort gives, now that a public appeal is made, can hardly be exaggerated. Hundreds of people have helped in this achievement and share in its glory. Nor do they deny the very special part played by one man, the Dean, in bringing about this happy result. Without him to urge and to plead and to co-ordinate, very little could have been accomplished. He has been the principal source of information about the appeal, consequently very little is known about his own personal struggles. It is clear that he must have written some hundreds of individual letters. He must have spent much time and energy in convincing first his personal colleagues, and then a wider circle, that it is not only desirable, but feasible, to seize this opportunity to rebuild the College. He has demonstrated his thesis that it is possible for a Bart.'s man to raise money for the appeal by talking to his non-medical friends, to the tune of something over £8000. He has kept the cost of raising the £65,000 in the private appeal to the incredibly low figure of less than £500. All this he has done as a kind of side-line to his normal activities of being Dean to the Medical College (strange to relate this does involve some work), being Surgeon to the Hospital, and earning his living in private practice. He has been something of an inspiration as well as being a midwife and a wet nurse to the appeal, and quite a lot of its success must be laid at his door. Anyway he is now as much up to his neck in the public appeal as he

was in the private, and just as much in need of the corporate support of those connected with the College.

The problems have altered a little. It is no longer just a question of putting up money, but of getting lay people to understand why it is important for them, too, to put up money for a medical college. The Prince of Wales helped us tremendously last autumn when he showed by his visit that he understood what we are aiming at. The Lord Mayor has done all in his power to make the objects of the appeal known throughout the City. Others are working hard to bring the project to the notice of those who can help. We have a rather special part to play in this phase of the appeal in that we can explain technically what it is all about. Medical education in fact has very little emotional drawing power. If the present Medical College were to be swallowed in an earthquake or overwhelmed by a tidal wave it would in many ways be easier. It is not immediately apparent that it matters that the country should have the best possible doctors in twenty or in fifty, or a hundred years' time. It is not generally known that with each year the making of a good doctor becomes more and more complicated, and that more and more equipment is needed. Buildings, laboratories, animal houses and the rest are all part of this equipment. Money for them must be found. The parents of one generation of students cannot be expected to meet the capital costs that are going to benefit many generations of students; in any case, it is not their responsibility alone to see that the population thirty years hence has good doctors. The State does a great deal to this end with grants towards running costs, but it is still the affair of the public-spirited to see that the country has the best possible training grounds for its future doctors. We have this opportunity to bring our particular training ground to a state in which it will serve for many years to come, and it is very much the business of the man in the street to see that we make the most of our chance.

One must apologize for reiterating this argument, so obvious to anyone connected with medicine. To the layman it often has to be put as a new point of view. Somehow we must make it generally known that this appeal, though it is not aimed at saving anyone from immediate starvation, has a very real application to the country as a whole. This is where the organization that saw the appeal so successfully through its private phase can play a determining part in the public appeal. We have a good cause in getting the new College built; we are a compact body of people who understand what it is all about; we must now get the meaning of the appeal generally known and understood.

CHARLES F. HARRIS.

## TREATMENT OF NEURASTHENIA.

(Continued.)

**R**EATIONAL treatment of any morbid condition must aim at removing its cause, and the treatment of neurasthenia should therefore be based on this principle. The treatment to be adopted will therefore be determined by the view that you may take as to the cause of this condition. As a number of different theories have been held as to the cause of neurasthenia, even within comparatively recent times, it is worth our while to consider them briefly.

(a) A view that was widely held, and which, indeed, contains a partial truth, was that neurasthenia was the result of exhaustion of nervous energy; according to this view, nervous energy was comparable to an accumulator, and when exhausted, recharging was required. No rational explanation was given as to why the patient's nervous energy was exhausted. In some cases it was attributed to overwork—a theory which was most gratifying to the patient's self-esteem; but overwork by itself will not produce neurasthenia, and the condition to which it gives rise is easily remedied by a holiday. Treatment of patients with neurasthenia was effected, by those who held this view, by prolonged rest in bed with overfeeding. Weir Mitchell was the protagonist of this method of treatment, and rest cures had a magnificent vogue for a time. Weir Mitchell was very successful with these, and so were a number of other doctors. Ross, in his admirable book, *The Common Neuroses*, a book which I recommend you all to study very carefully, points out that the success of this method varied with the enthusiasm and personality of the doctor who carried it out. But the patients were found to relapse, and as the doctor's enthusiasm and belief in his method waned, the cases did less and less well. This method of treatment in its original form is now practically abandoned.

(b) Reflex theories: That neurasthenia was due to such things as errors of refraction, usually quite small, to nasal spurs, to displacement of abdominal viscera, such as unduly mobile kidneys, dropped colon, and uterine displacements, the last alleged cause taking one back to the Hippocratic era when the womb was supposed to cause symptoms of hysteria, by wandering from the pelvis. The treatment consisted in those days of frightening it back to its anchorage by the evil smell of valerian. (Do not some of us still use valerian for females with hysterical disorders?) In later days the osteopath and chiropractor have had a fruitful harvest in replacing "displacements" of the vertebrae.

(c) A rival theory about the same time was the theory of toxæmia, usually intestinal and generally impossible

of demonstration by pathologists of repute. Still, the enthusiastic cultivator of the flora of the intestine and the equally ardent vaccine merchant were able to record their successes.

(d) During the present century Freud's writings have, I suppose, done more than those of any other author to focus attention on the mind as the prime factor in the production of psycho-neurotic disorders. It is true that so far as neurasthenia is concerned, Freud most surprisingly regards physical causes (sexual) as being entirely operative in its production. But I think that the majority of those who have studied this subject do not accept Freud's theory of the aetiology of neurasthenia, but regard it as being the result of mental processes, and therefore endeavour to treat those suffering from it by some form of psycho-therapy.

Curiously, perhaps, the laymen's views have usually favoured the theory that the patient's mental attitude was at fault. This is commonly expressed by saying: "If only he, or she, would pull themselves together, they would be quite all right." They regard their friends as suffering from a form of perverseness. This same point of view was largely that adopted by Du Bois of Berne. He tried to inculcate lofty ideals in his neurasthenic patients, urging them to adopt a system of philosophy such as that expounded by Plato. As he was a man of striking personality, he had great success, but few of us are blessed with a similar personality, and we shall do better to search out the causes which have led to the patient becoming neurasthenic, and if these can be dealt with successfully the results will be found to be extremely gratifying.

This brings us to the question: Why does an individual become neurasthenic? In the first place, there can be no doubt that certain individuals are more likely to develop neurasthenia than others. There is an inborn weakness in the nervous constitution of some individuals, which renders them less able to deal with difficult situations than their fellows. The type of personality is important. So far as this is concerned you can divide mankind roughly into introverts and extroverts. The former are shy, retiring, contemplative and analytic, whilst the latter are the opposite. The extroverts make friends easily and are "good mixers". If overtaken by psycho-neurotic disorders, the former are likely to become neurasthenic, whilst the latter tend to suffer from hysterical manifestations. Neurasthenia is commoner in those who have responsibilities, and who have by their training been educated to the idea of a sense of responsibility both for themselves and for others, whilst hysteria is more often met with in those who have not the same outlook. In the war it was the officers who mainly developed neurasthenia,

whilst the men manifested hysterical symptoms more commonly. People who develop psycho-neurotic troubles are usually of an emotional make-up. They feel things intensely, and it is in their reaction to affective circumstances that the seeds of a psycho-neurosis are sown.

Dejerine has laid a great deal of stress on the important rôle that the emotions play in the production of psycho-neurotic manifestations, and Ross has further developed and expounded the mechanism by means of which the patient develops a psycho-neurosis. Ross points out, and you will see clearly on reflection, that the symptoms of emotional reaction are identical in many respects with those which you will find exhibited by your neurasthenic patients—exhaustion, palpitation, tremor, fainting, vomiting, dyspepsia, anorexia, diarrhoea, frequency of micturition, etc.

We are familiar with all of these, not only as symptoms of the neurasthenic, but also as a sequel to emotional reaction. The conditioned reflex is also used by Ross to explain the recurrence of symptoms aroused by circumstances independent of, but related to the circumstances which produced the original emotional reaction. As we all have a tendency to rationalization, the symptoms experienced, which are quite genuine, are apt to be wrongly interpreted. The patient is quite aware of the distressing or difficult circumstances which induced the emotional reaction in the first place, but he does not connect them with his symptoms. It is easy to see how a number of secondary symptoms may arise in such a patient. In addition the doctor is often responsible for aggravating the patient's troubles by some careless expression of opinion, or an opinion given too hurriedly. Possibly two or three doctors have been consulted, and the probability that they have expressed different opinions only adds to the anxieties of the unfortunate patient. In mitigation of the unfortunate rôle which the doctor may play, it is only fair to say that his hand is often forced by the relatives of the sick person or the patient himself demanding a diagnosis. As a result, almost any febrile illness of unknown origin is called influenza, at first at any rate, and the doctor is often compelled to produce vague diagnoses, such as "poisoned heart", "anaemia of the brain", "weak lungs", etc., which have no real meaning, but which often induce an added anxiety in the patient's mind.

If we accept the rôle of emotion as prepotent in the production of neurasthenia, how are we to deal with the patient? We can only do this adequately by a very careful analysis of his story, and after getting his confidence, getting him to relate his troubles and difficulties in addition to his symptoms. Careful notes must be made and his symptoms and the chronological order of their appearance recorded. The dates at which

symptoms appeared must be compared with the history of such troubles and difficult situations as have been experienced. The relation between the two will be obvious to the doctor.

This will no doubt take a considerable time, but in the end it will save time. At this stage the doctor should on no account express any opinion on the case, but the treatment of the patient will have commenced. The next and most important step is to make a thorough physical examination of the patient. The more thorough this examination is, the greater will be the confidence of the patient that he has found a doctor who understands his case and who will help him. At the end of this examination the doctor will be in a position to express an authoritative opinion as to his patient's condition, and can assure him that he has no organic physical disease.

It is absolutely useless with such patients to give them a prescription, usually containing bromide, after listening for a short time to their symptoms, and perhaps making a perfunctory examination. The suggestion produced by the bottle of medicine is that they require physical treatment, and although for a time they may profess themselves as being "a little better", it is soon clear that they are making no material progress. The medicine may be changed, but after some weeks, if the patient is sufficiently faithful, it will be clear to both doctor and patient that no real progress has been made.

When the doctor is sure that the patient's symptoms are not physical in origin, and it is clear that treatment on psycho-therapeutic lines must be instituted, the question will arise as to how this should be carried out. In a number of cases it can be carried out quite well by the patient coming to his doctor, and his treatment need not interfere with his ordinary occupations, but in the more severe cases work has become impossible, the patient is often exhausted mentally and physically, is suffering from insomnia, and must for a time have bed treatment. Should this be carried out at home or away from it? There is no doubt that it should be done away from home if this is at all practicable. But even when it is not, treatment can be carried out successfully at home. The reason for keeping the patient in bed where this is necessary must be carefully explained, or the suggestion of physical illness will be conveyed, with most unfortunate results, as it is precisely this idea that the patient is likely to have of his condition.

At this stage in the treatment it is well to assure the patient that he is not in any danger of becoming insane. This is a very common fear with neurasthenic patients, but they are unlikely to express their fears to the doctor. They keep them bottled up and add immensely to their troubles by doing so.

The next step in the treatment of the patient consists in explaining to him the nature of emotional reactions, and how these may produce physical results. It is obvious that the more intelligent the patient, the easier will he grasp this idea and be able to apply it to his own case. The ideal to be attained is that the patient should believe this by conviction and not by faith, but I have no doubt that this is not always possible. At any rate the doctor will be able to assist his patient to realize that his difficulties are the cause of his symptoms, though he may not understand precisely the theory by which the relationship is explained. Talking over his troubles will help the patient to adapt himself to them. Of course there are a certain number of neurasthenics who are poor creatures, physically and intellectually, with no character to speak of, and these may prove to be not worth the trouble and time that this method of treatment entails. The doctor must use his judgment in deciding whether any particular patient is worth this effort. (I do not mean in terms of £ s. d.)

This line of investigation of the patient with neurasthenia and his treatment is what I believe to be the most helpful, because in my opinion it deals with the cause of the condition. It follows the lines which Dejerine described in his book, written in conjunction with Gauckler, *The Psychoneuroses and their Treatment by Psychotherapy*, of which a translation has been made by Jelliffe, and also further emphasized by Ross in *The Common Neuroses*. It is only possible in a lecture like this to give an outline of the theory and method. Those of you who are interested in the subject should certainly read both these books. That you will find them most interesting and helpful I am quite sure.

I suppose that it must strike anyone who examines the story of neurasthenia and the various methods which have been used in its treatment, that the patient has frequently benefited by a number of widely different methods of treatment. I think the only conclusion which can be drawn from this undoubted fact is that neurasthenia is due to psychological factors, and that the patient's mental attitude towards his illness is the all-important factor in its prolongation, and by implication in its production. The neurasthenic has lost confidence in himself. When he meets a doctor who will be interested in his story and will then assert with conviction that he can cure him, a long step has already been taken towards his recovery. The reason why so many patients treated by rest cures, replacement of kidneys, vaccines and so forth subsequently relapse is because, in my opinion, the method of treatment is really inadequate, in that it fails to give the patient any adequate explanation as to why he became ill. I believe that the theory of the emotional reaction on

which Dejerine and Ross have laid such emphasis is well founded, and its success is due to the fact that it affords a rational explanation, which any intelligent patient can understand, of the cause of his symptoms.

I have already shown that the human mind is always seeking for explanations—a process known as rationalization. The explanations which a neurasthenic finds for his symptoms are almost always of a depressing nature: that he is becoming insane, that he has "heart disease", cancer of the stomach, a tumour on the brain, and so on. Unlike the hypochondriac, he is more than ready to be convinced that such is not the case, but no method of treatment is likely to be quite successful which does not afford an adequate explanation of the symptoms which have caused so much anxiety; such an explanation should be one which the patient can grasp, and the truth of which he can see for himself. It is not good enough that the doctor should merely assert that such and such is the cause of the illness. He may be able to do this with sufficient authority to succeed for a time, but unless the patient can believe what he is told through conviction and not by faith alone, he is unlikely to reap any permanent benefit.

The method of investigation and treatment which I have outlined can be employed in the treatment of hysteria as usefully as in that of neurasthenia. It is of course true that in some cases psychological analysis of a more extensive kind will be required to unravel the causes of the emotional reactions which underlie the symptoms of which the patient complains.

C. M. HINDS HOWELL.

### INDIAN "FAKIRS".\*

(Continued.)

**F**EAVING the Hindu ascetics we come now to the true fakirs of India, who are Mohammedans. In Persia the word "fakir" means a poor man, and is synonymous with "dervish". There are many dervish orders in Persia, North Africa and Arabia, but the one with which we are here concerned was founded in the twelfth century, and its members are known as Rifáyites, *Rufaees* or "howling dervishes". The rites of these men are weird: with the aid of music, dancing and other stimulants they can work themselves up into such a state of wild religious ecstasy that they cut themselves about, eat live coals or broken glass, handle red-hot iron and mutilate themselves with instruments, not only without feeling pain, but seemingly with real enjoyment.

\* A paper read before the Osler Club on May 11th, 1934.



FIG. 1.—THE ANNUAL CEREMONY AT NIGHT.

Note the leader on the left with his Arab head-dress. The instruments and incense vessel on the mat in front of him. The crowd, partly obscured by smoke. The standing fakir with one instrument through his tongue and another in his right orbit.  
*(Copyright.)*



FIG. 2.—THE ANNUAL CEREMONY AT NIGHT.

*(Copyright.)* A fakir with an instrument through his tongue, and two more through his cheeks, supported by a friend.

One often hears about these "howling dervishes" but few men have seen them, and a good description of what they do is hard to find. Lord Curzon, in his book, 'Tales of Travel' (Doran & Co.), gives perhaps the best account under the title of "The Drums of Kairwan"; and so closely are these men related to the *Rafae* fakirs of India about whom I shall speak in a

to a moan, now ending in a shriek—and in the background all the time the ceaseless droning of the drums. The dance began slowly, about forty human figures rocking backwards and forwards in grim and ungraceful unison. The head priest looked on quietly, but the dancers became wilder and wilder, working themselves up into such a state of ecstasy that they eventually lost



(Copyright.) FIG. 3.—READY TO START, THEIR INSTRUMENTS SPREAD OUT IN FRONT OF THEM.

few minutes—even the names are really the same—that I am tempted to read you some passages from Curzon's description of one of their orgies, a performance he witnessed one night in a dimly-lit mosque in Kairwan in North Africa, a hundred miles south of Tunis. Amongst rows of marble columns around the dome about a hundred persons were squatting, and in the centre sat twelve musicians with their earthen drums and tambours. The lighting was dim, as the lamps hung from the roof were merely lighted wicks floating in oil in cups of coloured glass. The music was melancholy—a plaintive quavering wail of Arab voices, now falling

control of themselves entirely, behaving like beasts rather than human beings.

"The rapidity and vehemence of their gesticulations were now appalling; their heads swung backwards and forwards till their foreheads almost touched their breasts, and their scalps smote against their backs. Sweat poured from their faces; they panted for breath; and the exclamations burst from their mouths in a thick and stertorous murmur.

"The worshippers seemed to be gifted with an almost superhuman strength and energy. As they flung themselves to and fro, at one moment their upturned faces gleamed with a sickly polish under the flickering lamps, at the next their turbaned heads all but brushed the floor. Their eyes started from the sockets; the muscles on their necks and the veins on their foreheads stood out like knotted cords. One old man fell out of the ranks breathless,

spent, and foaming. His place was taken by another, and the tumultuous orgy went on.

"Presently, as the ecstasy approached its height and the fully initiated became *melboos*, or possessed, they broke from the stereotyped litany into demoniacal grinning and ferocious and bestial cries. These writhing and contorted objects were no longer rational human beings, but savage animals, caged brutes howling madly in the delirium of hunger or of pain. They growled like bears, they barked like jackals, they roared like lions, they laughed like hyenas; and ever and anon from the seething rank rose a diabolical shriek, like the scream of a dying horse, or the yell of a tortured fiend. And steadily the while in the background resounded the implacable reverberation of the drums.

"The climax was now reached; the requisite pitch of cataleptic inebriation had been obtained, and the rites of Aissa were about to begin. From the crowd at the door a wild figure broke forth, tore off his upper clothing till he was naked to the waist, and, throwing away his fez, bared a head close-shaven save for one long and



FIG. 4.—"DISINFECTING" ONE OF HIS INSTRUMENTS BY LICKING IT.

The boy behind is bending forward praying. The two old men are also muttering prayers; the expressions on their faces have been thought by some to suggest that hypnotism plays a part.

(Copyright.)

dishevelled lock that, springing from the scalp, fell over his forehead like some grisly and funereal plume. A long knife, somewhat resembling a cutlass, was handed to him by the sheikh, who had risen to his feet and who directed the phenomena that ensued. Waving it wildly above his head and protruding the forepart of his figure, the fanatic brought it down blow after blow against his bared stomach, and drew it savagely to and fro against the unprotected skin. There showed the marks of a long and livid weal, but no blood spurted from the gash. In the intervals between the strokes he ran swiftly from one side to the other of the open space, taking long stealthy strides like a panther about to spring, and seemingly so powerless over his own movements that he knocked blindly up against those who stood in his way, nearly upsetting them with the violence of the collision.

"The prowess or the piety of this ardent devotee proved extraordinarily contagious. First one and then another of his brethren caught the afflatus and followed his example. In a few moments every part of the mosque was the scene of some novel and horrible rite of self-mutilation, performed by a fresh aspirant to the favour of Allah. . . .

"Several long iron spits or prongs were produced and distributed; these formidable implements were about two and a half feet in length, and sharply pointed, as they terminated at the handle in a circular wooden knob about the size of a large orange. There was great competition for these instruments of torture, which were used as follows. Poising one in the air, an Aissaoui would suddenly force the point into the flesh of his own shoulder in front just below the shoulder blade. Thus transfixed, and holding the weapon aloft, he strode swiftly up and down. Suddenly, at a signal, he fell on his knees, still forcing the point into his body, and keeping the wooden head uppermost. Then there started up another disciple armed with a big wooden mallet, and he, after a few preliminary taps, rising high on tiptoe with uplifted weapon would, with an ear-splitting yell, bring it down with all his force upon the wooden knob, driving the point home through the shoulder of his comrade. Blow succeeded blow, the victim wincing beneath the stroke, but uttering no sound, and fixing his eyes with a look of ineffable delight upon his torturer, till the point was driven right through the shoulder and projected at the back. Then the patient marched backwards and forwards with the air and the gait of a conquering hero. At one moment there were four of these semi-naked maniacs within a yard of my feet, transfixed and trembling, but beatified and triumphant. And amid the cries and the swelter, there never ceased for one second the sullen and menacing vociferation of the drums.

"Another man seized an iron skewer, and, placing the point within his open jaws, forced it steadily through his cheek until it protruded a couple of inches on the outside. He barked savagely like a dog, and foamed at the lips.

"Others, afflicted with exquisite spasms of hunger, knelt down before the chief, whimpering like children for food, and turning upon him imploring glances from their glazed and bloodshot eyes. . . .

"For those whose ravenous appetites he was content to humour the most singular repast was prepared. A plate was brought in, covered with huge jagged pieces of broken glass, as thick as a shattered soda-water bottle. With greedy chuckles and gurglings of delight one of the hungry ones dashed at it, crammed a handful into his mouth, and crunched it up as though it were some exquisite dainty, a fellow-disciple calmly stroking the exterior of his throat, with intent, I suppose, to lubricate the descent of the unwonted morsels. . . .

"Several acolytes came in, carrying a big stem of the prickly pear, whose leaves are as thick as a one-inch plank, and are armed with huge projecting thorns. This was ambrosia to the starving saints; they rushed at it with passionate emulation, tearing at the solid slabs with their teeth, and gnawing and munching the coarse fibres, regardless of the thorns which pierced their tongues and cheeks as they swallowed them down.

"The most singular feature of all, and the one that almost defies belief, though it is none the less true, was this—that in no case did one drop of blood emerge from scar, or gash, or wound. This fact I observed most carefully, the *mokaddem* standing at my side, and each patient in turn coming to him when his self-imposed torture had been accomplished and the cataleptic frenzy had spent its force. It was the chief who cunningly withdrew the blade from cheek or shoulder or body, rubbing over the spot what appeared to me to be the saliva of his own mouth; then he whispered an absolution in the ear of the disciple and kissed him on the forehead, whereupon the patient, but a moment before writhing in maniacal transports, retired tranquilly and took his seat upon the floor. He seemed none the worse for his recent paroxysm, and the wound was marked only by a livid blotch or a hectic flush."

Many factors may account for the demoniacal possession of the performers in an orgy like this. Drugs such as Indian hemp and pathological conditions such as hysteria and epilepsy may play perhaps some part; but even without them it is not really so very hard to understand how these men may, for awhile, lose control of their senses, overcome by the emotional and neuromuscular influences of the dancing, the weird music, and the terrible antics of the other performers. However, as we know nothing of the habits or previous preparation of these men that Lord Curzon saw, it

would be unprofitable even to attempt an explanation of their performance. With the Mohammedan fakirs in India whom I shall now describe to you the case is very different. Their habits have been studied closely, we have been able to take many photographs of them, and they have even given us the instruments they use.

These people, a small community in Hyderabad City in the Deccan, call themselves Rafaee fakirs, and they claim to be direct descendants of the Rufaees or howling dervishes of Arabia. Their founder, Syed Ahmed Kabeer Rafaee Kazmi, was born in Mecca over 800 years ago ; he lived to be a saint of great renown, and died in Arabia in the year 1160. His religious rites centred round the practice of "Zurbath", or "self infliction of wounds", a practice which was at first carried out solely by members of his family, the secrets being handed down from generation to generation. In later years, however, disciples too were allowed the privilege of joining in the ceremonies. His fourteenth direct male descendant, Syed Shah Abdul Karim Rafaee, migrated from Arabia to Southern India nearly 300 years ago. It was he who established this sect of Rafaee fakirs in Hyderabad, and after living to be over a hundred years old he was buried in what is now the Begum Bazaar, and around his tomb an important ceremony takes place at night once a year. In his time Golconda, eight miles away, was still the flourishing capital of this part of India, and where Hyderabad city now stands was open jungle. The priests even now tell us that around their graveyard, in its early days, "tigers roamed and bears stole our fruit"; while to-day this same graveyard, with its innumerable tombs, lies in the midst of one of the most densely populated districts in all India.

This community of Rafaee fakirs in Hyderabad is composed of about three hundred men, women and children. Their leader, Haji Shums-ud-din Rafaee, direct descendant of their founder, has in his possession their sacred books—scrolls of Arab paper, jealously guarded, which explain in detail how the "Zurbath" or "self infliction of wounds" should be done, along with genealogical trees of characters common both to the Koran and to the Old Testament.

Their ceremonies of "self mutilation" are to-day of

three distinct types: a solemn religious celebration in memory of their founder, held once a year at night in the graveyard; smaller rituals at other times throughout the year in the palaces of Mohammedans of high rank; and thirdly, individual demonstrations in the bazaars for the base purpose of collecting money.



FIG. 5.—THROUGH TONGUE.

Their annual nocturnal ceremony ("Urus") around the tombstones and the smaller rituals by day in the palaces have been witnessed by very few Europeans, and it is these that will be described in this paper. In other parts of the world travellers have seen at times, in fairs and bazaars, the more simple of these practices; but individual, unsanctified performances are always irregular and incomplete, the more serious members of

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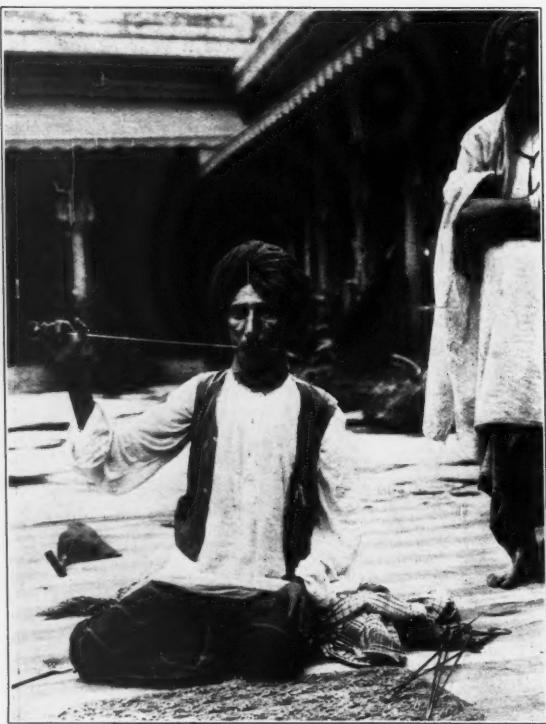


FIG. 6.—THROUGH BOTH CHEEKS. NO BLEEDING.  
(Copyright.)

their community frowning on this prostitution of their ancient rites.

I can find no reference to this group in Hyderabad in any of the literature. This is not altogether surprising when it is realized how difficult a city Hyderabad is to know. Being in a Native State and not directly under British control, no European was allowed, until recently, to pass through its gates without a special permit, stating the exact nature of his business and the length of time he wished to remain inside. My father, for long one of the few European doctors within reach of this city, possessed a free pass, but even he did not hear of the existence of these Rafaee fakirs until he had been there for many years. In this human backwater the tide of modern civilization is hardly felt; changes flow by, while in the stagnant depths of the city itself original practices continue undisturbed, and manners and customs that have long since died out in other parts of the world may still be studied.

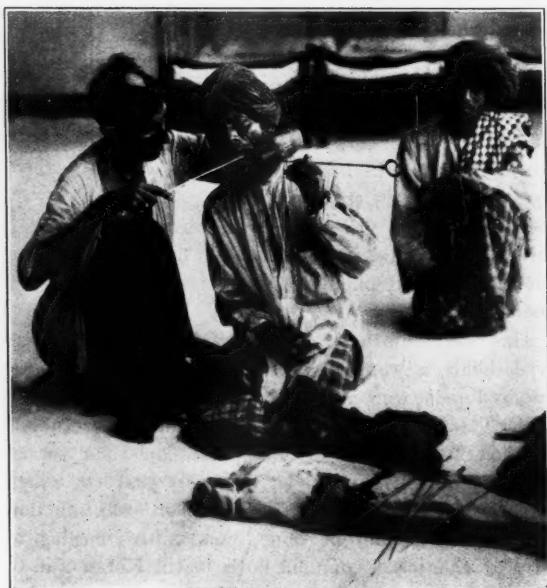
One morning in September, 1925, when I was on holiday in India, my father and I took photographs of the Rafaee fakirs for the first time, and some of these I was able to repeat one afternoon a few weeks later, when I saw them again alone. Seven of the eleven

pictures in this number of the Journal were taken on these two occasions, and they have not before been published. Since then my father has watched these fakirs many times by day and four times by night at their annual ceremony; with my brother Alan he has added many most excellent photographs to the series, and he has also taken a complete cinematograph record of their performance.

#### THE ANNUAL CEREMONY.

Every year, to celebrate the anniversary of the death of their founder, these Rafaee fakirs pass three solemn days in fasting and in prayer; the fasting is strict and the prayers are long, as the whole Koran has to be read through. After dark on the last night a weird ceremony takes place, a ceremony which resembles closely in its sensational atmosphere and grisly detail that seen by Lord Curzon at Kairwan in North Africa. It is held amongst the tombs in the private graveyard of the sect in Begum Bazaar, in the North of Hyderabad City. It is revered by all as a most solemn religious occasion.

Many of the tombstones are brilliantly lit, and many are decorated with flowers and cloth; all around are incense vessels pouring forth their pungent fumes. The honoured grave is larger, brighter, and more ornate than the rest; and around it, leaving a small space in the centre, crowd the audience of perhaps three thousand men. Between the tombs is holy ground, so that all



(Copyright.) FIG. 7.—SKILLED ASSISTANCE.

who enter must first take off their shoes. Near the centre are the musicians with their drums or tom-toms, from whose incessant deafening noise there is no escape. Behind these queer musicians sit some of the priests, mumbling and muttering quotations from the Koran.

A general buzz of excitement announces the arrival of the Leader, Haji Shums-ud-din Rafaee; a remarkable-looking man, Arab in appearance and quite unlike the local Deccanis in the closely packed audience around him. In the two photographs (Figs. 1 and 2)—the only pictures, as far as we know, of this nocturnal ceremony,

foreground of Fig. 1. The incense it contains he brought from Arabia, and from it arise clouds of smoke.

The monotonous drumming of the tom-toms begins again as the first fakir steps forward to the mat and bends down to pick up one of the long pointed instruments lying there. Holding it up with arms outstretched, he presents it to the priest, who passes it through the incense smoke and blesses it; thus imparting success to the undertaking and safety to his person.

The tom-toms stop once more, the murmur of the crowd dies down, and for a moment everything is



(Copyright.)

FIG. 8.—“SKEWERS” THROUGH EACH CHEEK FROM INSIDE THE MOUTH.

and here published for the first time—he is seen sitting on the left in his Arab head-dress, the green of which is a sign to all that he has but recently returned from a pilgrimage to Mecca, and is now entitled to be addressed as *Haji*. On the mat before him is laid out the singular collection of instruments soon to be put to such gruesome use.

The drums cease for a moment, and in absolute quietness—strange for such an assembly in the East—he opens the ceremony with a prayer for the peace of the departed soul of their founder in Arabia, a prayer devoutly followed by all Mohammedans present. His next duty is to light the incense vessel seen in the

quiet, as this strange man takes the instrument in his right hand and with uncanny deliberation drives it through the middle of his tongue. Not yet content, with hardly a pause, he snatches two others from a friend and runs both these through his cheeks; and pierced like this, urged on by the renewed beating of the tom-toms, and cries of approval from his friends, he struts about, this way and that, turning round and round for all to see, justly proud of his terrible appearance, showing no evidence whatever of pain, and bleeding not at all. In Fig. 2 we see him holding the instrument through his tongue, with two others through his cheeks supported by a man behind him. After a



FIG. 9.—PRESSING INSTRUMENT THROUGH SKIN OF ABDOMEN.  
(Copyright.)

time, with the help of his friends, the instruments are removed, and once again he is blessed by the priest, while the smoke from the incense plays on his wounds.

His place on the mat is taken immediately by one of his brethren. They follow one another in quick succession, each doing something to show his immunity from bodily pain: young men, like the one just described, pierced several times at once; boys, from want of practice, doing one or two tricks imperfectly; or the pathetic figures of feeble old men trying hard to do the things that they must have found easy in their younger days. As well as piercing their tongues and cheeks, some transfix their abdominal muscles; others drive instruments firmly into the tops of their skulls; while still others prefer to transfix their necks, either from side to side or from front to back, not just under the skin but right through the deeper structures, each performance more alarming than the last.

The most dramatic of all their demonstrations has yet to be described. A fakir, perhaps already pierced in many places, gouges out his eyeball with a pointed instrument inserted into the corner of the orbit, levering the eye so far forward that it remains dislocated in front of the lids after the instrument has been withdrawn. With his eye protruded in this hideous manner (it can just be seen in Fig. 1) he dances about in front of the audience for several minutes, before pressing it back into place with the palm of his hand.

The ceremony is concluded with another prayer for the peace of the soul of their founder, the whole audience joining in the solemn *Ameen*. When the

crowd has dispersed the performers break their fast with an enormous meal.

There are two points about this annual ceremony of the Rafaee fakirs that impress onlookers most forcibly: the intense religious fervour shown by everyone present, and the hypnotic influence of the monotonous drumming of the tom-toms. The first of these points was strikingly illustrated by a missionary with forty years' experience of religious rites in India, who, at the end of this ceremony, insisted that never before had he seen such evidence of genuine and pious zeal in so large a crowd. The second point, the profound influence of the drums, was brought out well by a hard-bitten and far-travelled British cavalry officer, who, towards the end of the performance, with the incessant throbbing of the tom-toms in his ears and the tense atmosphere all around him, remarked that with but little further instigation he would leap into the arena and transfix himself—surely a clear example of the uncanny influence that oriental music and an emotional atmosphere like this may have on the minds of onlookers, even the least impressionable, an influence stressed so very well by Curzon in his inimitable style in that description of the resounding and reverberating drums of Kairwan.

#### THE RITUAL IN THE PALACES.

On the September morning in 1925 when I was first introduced to these strange men of Hyderabad, it was by the invitation of Nawab Salar Jung, in whose palace,



FIG. 10.—THROUGH THE ABDOMINAL WALL.  
Scars of old attempts are clearly seen. Not a drop of blood.  
(Copyright.)

in one of its forty-eight courtyards, the demonstrations took place.

In bright sunlight four Rafaee fakirs sat on a coloured rug among the palms, with their instruments laid out on the ground in front of them (Fig. 3). These weapons, the same as those used at the nocturnal ceremony, were long metal skewers about a quarter of an inch in thickness, and varying from one and a half to nearly three feet in length. One end tapered to a point, the other was adorned with the crescent of Islam, while the surface, though polished, was slightly rough.

With his fellows muttering prayers behind him, one of the fakirs, Zil Fakhr Shah, knelt forward, picked up

same fakir, with his body bent forward and the crescent end of another long skewer pressed against the ground, pushed the point obliquely through a fold of the skin of his abdomen (Fig. 9). The site chosen was puckerred with many scars (Fig. 10), and the point protruded about six inches away (Fig. 11). There is no reason to suppose that the peritoneum was pierced.

At the end of this first half of the performance, the absence of bleeding and the apparent freedom from pain were the most intriguing problems left in our minds.

J. H. HUNT.

(To be concluded.)



FIG. 11.—THROUGH THE SKIN OF THE ABDOMINAL WALL.  
(Copyright.)

a skewer, licked it—by way of sterilization!—(Fig. 4), wiped it dry on his shirt, and, just as at the annual ceremony, ran it slowly and deliberately through the middle of his protruded tongue (Fig. 5). The expressions on the faces of the old men on either side in Fig. 4 are worth noting.

After a moment or two of demonstration this weapon was withdrawn and he passed another through his cheeks (Fig. 6). I shall not describe in detail here how these things were done, as the photographs show this clearly—well enough, we hope, to convince most people that conjuring and trickery play no part. On some occasions separate skewers were passed through each cheek, a colleague perhaps lending a helping hand (Figs. 7 and 8).

After withdrawing these instruments in turn, the

**E**N writing about the medical side of *Endeavour's* trip, one feels that the least interesting aspect of this very interesting experience is being recounted. But at least it will be less controversial and less open to wholesale contradiction than an account written on almost any other aspect of the trip.

The writer had signed on as an ordinary deck-hand and not in any medical capacity. Sailing on board Mr. Sopwith's 700-ton Diesel-engined yacht, was our official and very efficient M.O., Mr. Roscoe Clark, a colleague from Guy's.

On the trip over as far as the Azores incident was conspicuous by its absence on board. The crew ate and slept heartily—too heartily for the amount of exercise taken. The movement of the ship made most forms of activity difficult, and boredom and constipation were the chief complaints. The ship's medicine chest was well stocked with Epsom salts and cascara pills, so that one of the above could be adequately dealt with. According to those of our pros. who had been on board her, *Shamrock's* crew in 1930 had suffered severely from an enteritis, possibly in most part due to over-eating and lack of exercise.

At the Azores those of the amateurs who had been on board *Endeavour* moved on to *Vita*, being relieved by the other half of the amateur crew.

Once on board *Vita* it was possible to work out a routine of training, which started at 6.15 a.m. with scrubbing decks, and culminated in a "work-out" at physical jerks at 6 p.m. At the latter the unofficial Assistant M.O. was elected trainer, and from 6.15 p.m. onwards was probably the most unpopular man on board.

## "ENDEAVOUR."

### JOTTINGS FROM THE MEDICAL LOG.

Six days after leaving the Azores a wireless message was received from *Endeavour*. She wanted to put one of the amateur crew on board for "slight medical attention". In a freshening breeze and a sea that had got up just sufficiently to make the manœuvre exciting, a boat was got off from *Vita* with an amateur as relief crew and the patient was collected. The whole operation took forty-five minutes, and was carried out in a very seamanlike manner.

With the arrival of the patient, both M.O.'s went into consultation and agreed on the diagnosis of a perfectly good carbuncle on the back of his neck. This was treated by the application of a suction cup followed by mag. sulph. paste dressings three times a day. Halibut-liver oil was also administered internally. The patient made an uneventful recovery, and the carbuncle was completely healed in a fortnight.

Our next case, a badly sprained ankle, turned up within two hours of getting *Endeavour* alongside the quay at Herreshoff's Yard at Bristol, R.I. The ankle was duly strapped, and its owner returned to duty next day suffering hardly any inconvenience.

The same day Clark left us and we only saw him at long intervals after this. It was thought that the presence of two M.O.'s was unnecessary.

Soon after this it became necessary to establish two regular surgery hours, the first after breakfast, and the other took place at varied times between 6.30 and 10 p.m. after the day's work was finished. The attendance averaged about five at each for a couple of weeks.

The second mate developed an obstinate crop of six boils on the back of his neck, alongside a large sebaceous cyst he had had for years. The boils yielded slowly to mag. sulph. paste dressing and brewer's yeast *per os*. The professional mastheadman had had a knock on his elbow from the sheave of the main halyard while on his lofty perch. After a latent period of four days he developed a very painful elbow. A sub-periosteal haemotoma on the tip of his olecranon was diagnosed, but in twenty-four hours a hot, brawny induration had spread down the ulnar border of his forearm. Infection was suspected, a septic stump of a tooth being a possible primary focus. But the man's temperature and pulse were normal and general condition excellent. Our official M.O., who had paid us one of his flying visits, was called in to a consultation, and it was decided to watch and wait. The condition cleared up spontaneously after a couple of days' rest.

During the refitting process *Endeavour* was hauled up high and dry on a slip. Her centre-plate, a galvanized steel affair, was lifted by winches into a position where it could be polished. Two of the amateur

crew did the polishing, each armed with a contraption which consisted of an electric motor driving a revolving steel disc on which were placed circular pieces of sand-paper. As can be imagined, a lot of dust evolved. Both of them, after finishing the job, complained of anorexia and nausea, and that all food tasted of zinc. By next morning they were feeling distinctly under the weather. Both had developed a tracheitis with a troublesome cough and retrosternal pain. One had had a couple of "shivering fits" in the early hours of the morning. Examination failed to show any rise in temperature or pulse, or physical signs in the lungs. An expectorant linctus was prescribed and a half pint of milk *t.d.s.* The nausea and lack of appetite lasted thirty-six hours.

On the day we sailed down to Newport from Bristol under full racing rig, a second sprained ankle was added to my bag.

A few days later, while out on a trial spin, one of the professional crew was hit on the back of the head and neck by the boom. He was unconscious for a few seconds, and was neatly dropped into the bosun's locker out of the way and a first examination was made. Not suspecting any great damage, he was supported as far as his bunk in the fo'c'sle. During the next two hours, whenever my duties as deck hand allowed me, I paid him flying visits. A steadily dropping pulse-rate with increasing nausea and the appearance of paræsthesia at the finger-tips of both hands suggested the probability of interesting complications setting in. He was turned over to lie on his face, which position he was glad enough to keep as his shoulders were very painful. That night he became very querulous, and a handful to manage. Next morning he was removed on his cot to Newport Hospital for X-rays of his skull and upper spine and for observation. The X-rays proved negative as to any bony lesion, and he rejoined the ship after five days.

Mention here might be made as to the condition of the crew's hands. The amateur part of the crew had expected to have a lot of trouble in this direction, and on the way over a lot of rope-hauling had been indulged in, in order to harden them. But with the exception of one member of the crew, trouble with hands was of a trivial nature. Broken finger-nails acquired in handling the sails and cuts from the sharp ends of stranded wire rope were the chief minor annoyances. Surgical plaster was in great demand, mostly for the last.

The one exception was an amateur who, by reason of the excessive horniness of his hands, had on the trip over been the envy of us all. These hands, whose palmar surfaces resembled more the back of an armadillo in their scaliness than human extremities, gave their owner and the Assistant M.O. a lot of trouble. The

tough skin cracked and got infected, and on four occasions whitlows developed which had to be incised.

Dressings were done not always under ideal conditions. For instance, on one occasion the doctor and his patient retired to what had been *Endeavour's* bathroom. The bath had long since been removed, as so much useless weight. We only used it to keep our beer in, anyway. The patient walked straight into a couple of fly-papers which were hanging from the ceiling. He was eventually unstuck. Then the doctor in his turn became involved with another fly-paper that had performed its intended function only too well, at the precise moment that he was endeavouring to ram a sterile gauze drain into a wound. After further delay for unsticking, this delicate operation was successfully completed, in spite of the fact that the M.O. set his hair on fire at the crucial moment over the chimney of one of the two oil lamps that were supplying the illumination. Then, one day, one of the after-guard called us in. We could not help feeling that our stock had risen considerably, just as the country G.P. must feel when the neighbouring duchess calls him in for the first time. An enteritis was diagnosed after a full routine examination, kaolin in 5ij doses of the powder prescribed *t.d.s.* and the patient made a rapid and most satisfactory recovery.

For a few days before the races started things became very slack in the medical line, and regular surgery hours were abandoned. The whole crew were very fit and strong. However, just before the start of the second race an incident occurred which might quite easily have terminated fatally for the man concerned. We had towed out to within half a mile of the starting-line. There was quite a fair sea on, and both parts of the main halyard had swung aft on each side of the mast and fouled two lugs about four-fifths of the way up. The professional masthead man was hauled up in a sling to clear the mess. Halfway up he lost hold of the halyard he was guiding himself up by. The roll of the ship swung him out through a thirty-foot arc. Twice he was crashed against the mast. Down on deck it was a very frightening sight, and everyone expected him to fall out of his sling. He was lowered away and lost consciousness just before reaching the deck. The job was finished by an amateur. The injured man was carried into the state-room aft, where he regained consciousness almost at once. Remarkably enough no bones were broken, but he was severely shocked. He was lashed on to a couch to prevent his being thrown off by the ship's movement. His left thigh and left side of his thorax were severely bruised, but he insisted on coming on deck for the last hour of the race. His thigh was sufficiently tender to keep out of the bosun's

chair. But he carried on with modified duties the next day. Every evening the M.O. practised his skill as a masseur on that thigh, and in five days most of the stiffness and pain had disappeared.

The professional skipper became the next candidate for massage. He fell down the bosun's locker during the course of a race, badly bruising his left leg just below the upper end of the fibula. The leg became very swollen, and oedema extended to below the ankle on the lateral surface.

He was too important a member of the crew to spare, and so had little chance to rest his leg. And in spite of massage and intensive hydrotherapy, his leg remained swollen and oedematous till the end of the series.

The crew on the whole thoroughly appreciated having an M.O. living on board. They seemed to take a delight in hauling him off a job of work, just to give them a dose of salts, or for something else equally trivial. And it was interesting to note that a dose of salts given with a few words of advice from the "Doc." was apparently much more effective than one taken on the patient's own initiative. Such is the power of suggestion.

The work on the ship was for the most part heavy manual labour. During the tuning-up period it was perhaps at its hardest. One rose at 6.15 a.m. to the sound of "Rise and shine my hearties" or "What are you going to tell 'em to-day?" or some such happy phrase from the ship's cook. During the races the day started earlier. Deck scrubbing and the general "shammy down" to follow commenced at 5.30—six hours before the starting-gun of the day's race.

All the races were tensely exciting. On the way out to the start, which was twelve miles away, the sea was so crowded with craft that it looked like Epsom Downs on Derby Day. The reception we received on getting back after each race, whether we had won or lost, was terrific in its heartiness and cordiality. Sirens, hooters, and even the horns of the cars along the edge of the harbour were let off in one huge babel of sound.

At the end, when we left Newport, we all carried away what will be a lasting impression of the sporting and kind way we were received and treated by everyone.

W. F. R.

#### The Housing Problem.

Two Deans in two contiguous ages born  
The Hospital of Rahere did adorn.  
Most mild of mien, of tongue a trifle tarter,  
The first acquired for us a Royal Charter.  
Shall gold be grudged, or given with a grouse,  
When t'other would provide a Charter House?

## "THE LIFE AND WORKS OF CHARLES BARRETT LOCKWOOD, 1856-1914."\*

(Continued.)

### III. ANATOMY; THE GREAT NORTHERN HOSPITAL; BACTERIOLOGY.

"By the eye you will learn much."—Richard Bright.

When Lockwood began demonstrating anatomy in 1881 the number of students attending the rooms was higher than ever before, and a large new room had to be furnished and arranged. Lockwood and Bruce Clarke worked hard together in establishing what came to be the best dissecting room in London. The work was re-organized and weekly written examinations were held, the papers being corrected with the students. Lockwood instituted dissected specimens, to be kept to help men to read up their parts; he also introduced a course of demonstrations on advanced anatomy, and had specimens and dissections carefully prepared to illustrate every point. His own dissections showed that his skill in that line was unrivalled, while, as a demonstrator, his great object was to encourage men to see things for themselves. If a student asked him a question he would say: "Come and see," and then go round the rooms till he found the answer on a part. Mere book-knowledge counted for little in his sight unless accompanied by determination on the part of a man to take nothing on trust until he had seen it, to learn each piece thoroughly, and to draw what he saw. This attitude, coupled with his well-known dislike of mediocrity, led at the time to the invention of some doggerel lines—

"Who tries to learn his work by Gray,  
A helpless, hopeless lump of clay?  
The average man."

"He was an excellent teacher, clear and precise," says one who heard him. As a lecturer on anatomy he liked to strike an original note. His first lecture of one series was solely on Anatomy Books, which he said were all bad, though Quain was less bad than most. Some sought to explain this qualification by the fact that Quain alone, at the time, referred to four different pieces of anatomical research carried out by Lockwood himself. His patronage, however, was short-lived, for he proceeded to discuss the book critically, beginning with the Preface, next going on to the Index, and so surveying with caustic wit the whole book.

Anatomy to Lockwood was no series of dry facts, but a living subject. He knew it to be the very foundation of surgery, "the bed-rock upon which surgery is built", as he described it, ". . . not the work of

two or three winter sessions but of a lifetime". Moreover, he aimed above all at the interpretation of anatomy. "The human body was a soulless thing, a mere Undine," he said, "until morphology and embryology came to tell us the meaning of so many things hitherto mysterious . . . Comparative embryology is the very soul and essence of scientific anatomy. Nor does this comprehend all. Histology and microscopic anatomy ought to be mentioned, also the art of dissection and of anatomical preparation".

Lockwood therefore studied embryology closely, teaching most of it to himself and thereby gaining a deeper insight into his anatomical and surgical work. He spent much of his time in original research and published a number of papers on the development of the great omentum, arteries of the abdomen, the testicles, the pericardium, diaphragm, great veins, and upon other embryological subjects. Another rhyme invented about Lockwood at that time runs—

"Who knows his pericardium well,  
At embryology is an awful swell?  
Why, only C.B.L."

Two papers written by Lockwood at this period deserve special mention here. The one was concerned with the "Anatomy of the Muscles, Ligaments and Fasciae of the Orbit" (6), and the other, published afterwards, dealt with "The Fossæ round the Cæcum" (7). In the first of these papers he described two structures which came to be known as the tendon of Lockwood and the suspensory ligament of Lockwood, while in the second paper he gave what has become the classical description of the various peritoneal folds and pouches about the cæcum and appendix. These fossæ are of special importance from the occurrence in them of retroperitoneal hernia.

The practical aspect of anatomy was always before Lockwood, and an example of this is afforded by a contribution from him to the *British Medical Journal* in 1883, headed "Ligation of the Occipital Artery—A Dissecting Room Operation". The process he described was certainly directed towards acquiring surgical dexterity and learning anatomy in a highly practical manner.

His attention to the minutest details and his determination to take no authority from the text-books is well shown in a memorandum which he sent to the *British Medical Journal* in 1885 about "The Use of the Fossa at the Lower End of the Fibula". This fossa the books described as giving attachment to the posterior fasciculus of the external lateral ligament of the ankle-joint. But Lockwood examined numerous specimens and found that this was only partially true and that its most important use had been overlooked. He pointed out

\* The Wix Prize Essay, 1934.

that the ligament is attached to the lower part of the fossa, the upper part serving for the reception of the ligament during extension of the foot.

With Bruce Clarke he brought out *The Dissector's Manual*. It was characteristic of him to include in it a glossary with derivations, but he was unable to put on paper what he could demonstrate so well on the corpse. It contained a good deal of perhaps unnecessary detail about the organization of dissection and preparation of the subject. The reviewers were hard, and remarked: "We cannot say that a perusal of this new work has persuaded us that it supplies any real want of the

anatomy might become if approached on a synthetic rather than an analytical basis. "The hardest part of our task as teachers is done," he said, "when we have taught our pupils to observe and think for themselves—a task, I confess, hard to achieve, but full of interest to ourselves and highly conducive to their success".

The vigour with which Lockwood carried out his researches and the strenuous time which he spent in gaining a foothold on the ladder of achievement made their mark upon him. "His long period of service in the dissecting-rooms," wrote Marmaduke Shield, "permanently damaged his health to an extent probably known only to myself. Lockwood often referred to this in conversation, and asserted that he never recovered full health and vigour".

It is certainly difficult to grasp how he managed to find time to get so much done, for, in addition to his work in the dissecting rooms, he had been appointed to the surgical staff of the Great Northern Hospital shortly after he became demonstrator in anatomy. He was also Clinical Assistant to Mr. Warren Tay for a time at the Royal London Ophthalmic Hospital, and had his private work to attend to as well. Yet throughout this time he was making his name as a teacher of anatomy and of operative surgery, and was doing original work of a high order. In considering his powers of concentration, his penetration, and his accuracy, one cannot help recalling the great name of John Hunter, whom in many ways he resembled. Both of them were men of a determined and somewhat brusque personality, treating fools with scorn. Both were possessed of an insatiable curiosity, concerned with function no less than with form. Above all, both of them were sceptical of hearsay evidence and made it their business to see, to observe, and to "try the experiment".

The value of medical societies for the discussion of new work was always appreciated by Lockwood, and he was instrumental in the founding or at least two. One of these was the Anatomical Society of Great Britain. For some years before its institution, Sir George Humphry had contemplated the formation of an Association of British Anatomists, but it did not take definite shape until Lockwood was associated with him in its organization. Humphry, Lockwood and Macalister discussed the matter during several week-end visits to Cambridge, and Lockwood willingly undertook the heavy task of enlisting the interest of the teachers of anatomy in the London schools. His labours bore fruit, and the first preliminary meeting of the Society took place early in 1887 in his own house in Upper Berkeley Street. It was followed shortly afterwards by a public meeting at St. Bartholomew's Hospital,



FIG. 1.—SPECIMEN PREPARED BY LOCKWOOD TO ILLUSTRATE HIS PAPER ON "THE ANATOMY OF THE ORBIT" (1885), AND PRESENTED BY HIM TO THE HOSPITAL ANATOMICAL MUSEUM. THE SUSPENSORY LIGAMENT OF THE EYE ("LIGAMENT OF LOCKWOOD") IS SEEN FROM ABOVE. THE EYE HAS BEEN REMOVED.

(Reproduced by kind permission of Professor H. H. Woollard.)

medical student", and, what was worse, "Many of the diagrams have but little artistic merit or anatomical accuracy" (8). This attitude was possibly somewhat biased owing to Lockwood's rather unorthodox and dogmatic views on what could and what could not be seen on dissection. None the less, it was as a practical demonstrator of anatomy that he excelled, and at the British Medical Association Meeting in Glasgow in 1888 he delivered an address "On the Teaching of Anatomy" which showed something of his methods of work. Always strict about the correct use of words, it was typical of him to open the address by defining what was meant by Anatomy. He spoke discouragingly of "cramming", and in an original way showed how simple some of the more complicated pieces of

with Humphry as President and Lockwood as Secretary. He read a number of important papers to the Society, and later, in 1902, was unanimously chosen as its President.

The origin of the other Society, with which Lockwood was associated, was concerned with the removal in 1888 of the Great (now the Royal) Northern Hospital from the Caledonian Road to its present site in Holloway. Lockwood had been appointed Assistant Surgeon to the Hospital in 1882, and he remained attached to it for seventeen years. When the move was made from the old quarters, fierce opposition was encountered from the local practitioners of Holloway, who feared that, with the coming of a large out-patient department, the bread would be taken out of their own mouths. But it was Lockwood who brought good temper and reason to bear upon a difficult situation. Not only was opposition stilled, but the local doctors were brought into friendly relationship with the hospital by the establishment of the North London Medical and Chirurgical Society, a body which still continues as a very active memorial to its founder.

At the Great Northern Hospital Lockwood gained his early experience in operating. He tried there to get the sisters and nurses to become inculcated with "aseptic" methods, but the difficulties were immense. There was only one operating theatre, and it was no uncommon thing for from three to ten foully septic cases to require operation within twenty-four hours. One of his colleagues of that time says : " As an operator he always seemed to me to be in a state of high nervous tension, which sometimes found a vent in finding fault over trifles." The conditions irritated him and he often had a sharp word for the way in which his instructions were carried out by the nursing staff, whose work he would often compare disparagingly with that of the nursing staff at Bart.'s. But little ill-feeling was engendered, for it soon came to be known that at Bart.'s the nurses were being told that if they wanted to see how things ought to be done they should go and take a look at the nursing staff of the Great Northern Hospital.

Lockwood's surgical skill soon became evident and he was always tending to strike out on new lines and put original ideas into practice. His wards had to be kept scrupulously clean, and his colleagues quickly recognized in him a man with power to his elbow. At the meetings of the Medical Council of the Hospital he would cut short speeches that seemed unnecessarily loquacious in a manner peculiarly his own. Problems required dealing with in a practical manner, and he had little time to spare.

The small hospital museum was fitted up for him as a

laboratory, and here for many years he studied and experimented, deeply interested in the new science of bacteriology. One day from the hip-joint of a boy supposed to be suffering from acute rheumatism he obtained fluid from which he grew and identified *Staphylococcus aureus*. He injected a solution of the growth intravenously into a rabbit and subsequently obtained *Staphylococcus aureus* from an abscess round its spinal cord. The subject fascinated him, for "Koch's Postulates" proved to be no mere theorizing, but a matter which could be investigated and seen with his own eyes. His work in this little laboratory led him on to investigate the question of surgical cleanliness of the skin, and his researches were eventually published in his book, *Aseptic Surgery*.

Much of Lockwood's early bacteriological work was done under the guidance of Klein, an Austro-Hungarian, who came to London from Vienna in 1871. The absence of any training in bacteriology at the London hospitals was a matter that had for some time been causing Lockwood much serious thought, and consequently, in 1889, he decided that with the help of Dr. Vincent Harris he would, during the following summer session, hold at Bart.'s the first class to be given there in Elementary Practical Bacteriology. Considerable opposition to the scheme had to be overcome, but the class was only open to qualified men, and it was attended by a few of them, of whom Sir Holburt Waring tells me he was one. The course, as a matter of fact, proved to have such possibilities that in the same year (1890) a special laboratory for bacteriology was constructed, and plans for a more extensive course the following year were made. It is of interest here to recount the items in the first syllabus of bacteriological teaching at the Hospital. The subjects were treated in the following order :

" Microscopes and high powers—oil immersions. Bacteria, structure and composition; their distribution, classification, and morphology; their life-history, growth, and reproduction. Spores.

" Sterilization. Instruments. Incubators. Potato Cultures. Bacteria of Water.

" How to distinguish different species of Bacteria. Staining reactions. Cultivations in different nutrient media. Examination and Cultivation of the *Bacillus subtilis* in different media.

" Inoculation. Bacteria of wounds and abscesses. Cultures from wounds and blood. Septic and Infective Organisms. Fractional Cultures.

" Pathogenic Organisms. Anthrax. Tubercle. Leprosy, etc.

" Pathogenic Organisms. The question of attenuation of Virus."

These classes he gave for three years in succession until, in 1893, the work was taken over by Dr. Kanthack. The shortcomings of his own knowledge of the subject Lockwood would have been the first to admit, for at that time his learning was but rudimentary. Nevertheless he put the whole of it at the disposal of those with whom he worked, in the confident hope that it would prove, as indeed it did, of first-class importance for

practical use in ward and theatre. Much knowledge and experience yet remained to come, but he would gladly join himself with the sentiment of Hippocrates: "The power to explore is to my mind a great part of the art."

E. C. O. JEWESBURY.

*(To be continued.)*

### STUDENTS' UNION.

#### UNIVERSITY OF LONDON OFFICERS' TRAINING CORPS.

Again the U.L.O.T.C. enjoyed a glorious fortnight's camp, this year at Sandown, Isle of Wight, from July 15th to 29th. 200 members of the medical unit were present, including 46 from Bart.'s, the largest turnout.

The camp was well situated on a southern slope to the east of Sandown, and looked across the bay to Sandown and Shanklin. To the east of the camp were the high cliffs of Yaverland Point,

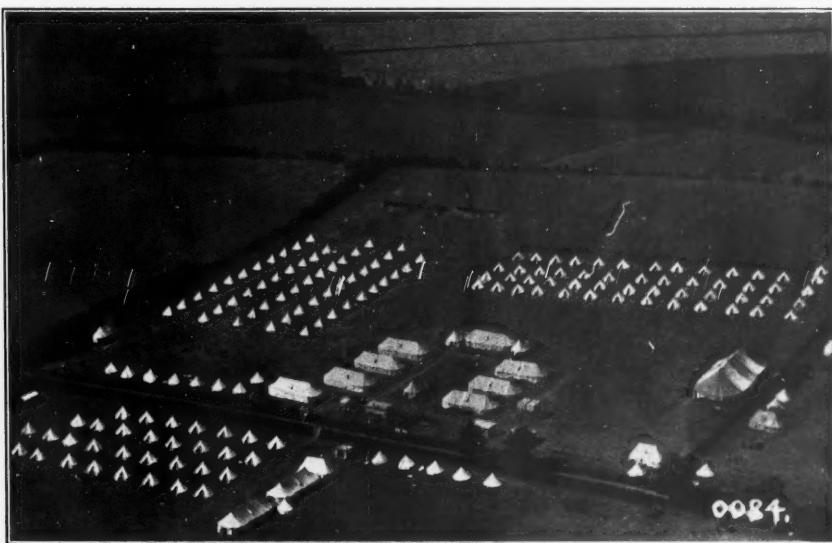
July 22nd, when the camp was thrown open to some 300 relatives and friends of members of the corps.

The second week at camp was a very busy one, working for the inspections, Herringham Cup stretcher drill competition, and Certificates A and B. Bart.'s were runners up in the Herringham Cup competition, being only 6 points behind U.C.H., who won with 85 points. Our results in the Certificates A and B were very satisfactory.

We had some very distinguished visitors with us, including our Honorary Colonel, the Earl of Athlone, Chancellor of the University, and Col. Filon, the Vice-Chancellor, who explained to us our military position and what was expected of us by the War Office, also Col. Macmillan, who gave us an interesting and amusing lecture on the work of the Field Ambulance in the last war.

Major-General O. Levers, D.S.O., M.B., D.D.M.S., of the Southern-Command, with the assistance of Major W. L. E. Reynolds, of the War Office, conducted the annual inspection, and also judged the Herringham Cup competition. The standard and efficiency displayed by the medical unit were very highly praised.

We were pleased to welcome an old Bart.'s man, Lieut. H. B. Lee, of the 47th London Field Ambulance, late sergeant of the O.T.C., who paid us a short visit.



from which a foolish amateur mountaineer from the contingent had to be rescued, considerably wiser, by the coastguards. Very good bathing was available on a sandy beach 200 yards from the camp, where, shortly after the days' work was done, many officers and men were to be found.

Our uniforms, now very comfortable since plus fours replaced breeches, were made more resplendent by the appearance of Officer Cadet Reserve Badges. Except on ceremonial occasions, shorts replaced the plus fours, and no jackets were worn on account of the very warm weather.

The first week was purely instructional, while the second was devoted to the practical side. During the first week the medical unit marched to Yaverland Fort and inspected the guns, which were being fixed up in readiness for a Territorial Competition. This took place the following week, and was watched by many interested members of the U.L.O.T.C. A soccer competition was started in which we did not fare well. Rugger was precluded by the hardness of the ground. There were two polo matches against the local teams, which were held in the sea at the end of the pier, and a third in the Pleasure Pool at the other end of the town. Of these we won two and drew one. Cricket matches were also played against nearby villages. Bart.'s men took part in all these activities, and several members won valuable prizes in the Sandown open swimming competitions.

An innovation at this camp was the Visitors' Day on Sunday,

On the 26th we had a successful and well-attended O.T.C. dance at the Pleasure Pool, and the troops enjoyed a cooling dip in the midst of their energetic evening.

On the 27th, the Medical Unit marched to Seaview and there embarked for Portsmouth, spending the morning inspecting the H.M.S. "Victory", and attending the ceremony of the launching of the new cruiser H.M.S. "Amphion". From Portsmouth we went to the Haslar R.N. Hospital at Gosport, where we spent a very instructive afternoon.

In the Gray Cup awarded for efficiency, Bart.'s tied for 1st place with U.C.H., a highly creditable performance, as we comprised the largest number present in camp. One pleasing thing to note here was the sporting action of the other members of No. 1 Coy., from the London and Kings, who voluntarily gave us their assistance on many occasions.

Everyone in the unit agrees that we could not have had a better time, and we hope that more Bart.'s men will join us next year.

At the end of the 1933 Academic Session, No. 1 Coy. was subdivided, St. Thomas's being transferred to No. 2 Coy. owing to the large number then in No. 1. The numbers have so increased that No. 1 is now the biggest Coy., not only in the Medical Unit, but in the whole contingent, numbering 140. Bart.'s has more than doubled its number in the corps in the past year from 36 to 76, and it is hoped that our number will reach 100 this year with the advent of many new recruits, and so make up a company of our own.

## RUGBY FOOTBALL CLUB.

## ST. BARTHOLOMEW'S HOSPITAL v. OLD BLUES.

Played on Saturday, September 29th, at Winchmore Hill, and won by 1 goal, 1 dropped goal (9 pts.), to 1 try (3 pts.).

This was the first match of the season for both sides, and consequently the play was somewhat ragged. The first half was even, and the Old Blues were somewhat fortunate in establishing a lead of 3 pts. when Jones, their left wing, scored in the corner as a result of a blind-side movement. The try was not converted.

After half-time Bart.'s definitely held the upper hand and soon took the lead, when Capper galloped along the touch-line and found Mundy in attendance at the right moment to finish off the movement and score in the corner. Morison converted with a very fine kick. Soon after this Kingdon, who was playing very well, but whose attempts at a drop goal had been unsuccessful, was at last rewarded by a goal from a difficult angle.

We might easily have scored more if our backs had not been quite so hurried and mechanical in their passing.

On the whole it was a very promising start to the season, Morison being in exceptionally good form, his clean fielding and touch-finding being as long and accurate as his best of previous seasons. Prothero, playing instead of Wilson, was good, and did a great deal of defensive work. The forwards seem likely to develop into a very good pack.

*Team.*—C. R. Morison (*back*) ; J. G. Youngman, I. N. Blusger, G. A. Fairlie-Clarke, J. S. Cookson (*three-quarters*) ; J. R. Kingdon, D. A. Prothero (*halves*) ; P. D. Swinstead, K. D. Moynagh, E. M. Darmady, G. Gray, W. M. Capper, R. Mundy, E. E. Harris, J. C. Newbold (*forwards*).

## ST. BARTHOLOMEW'S HOSPITAL v. LONDON HOSPITAL.

Played at Winchmore Hill on Wednesday, October 3rd, and lost by 2 tries (6 pts.) to 1 goal (5 pts.).

The value of these mid-week matches with other hospitals when we field such unrepresentative sides is very doubtful and they should either be cancelled or taken seriously.

It was a very scrappy game, the only bright feature of the first half being the clever run through of Kingdon, who scored between the posts. Morison converted. In the second half our pack seemed very tired, and the London forwards had it all their own way. Two tries were scored from forward rushes by Law and Stewart, neither being converted. During the closing minutes of the game the pack began to get more of the ball, but there was not enough penetrating power in the middle to score again.

*Team.*—C. R. Morison (*back*) ; J. G. Youngman, A. W. Little, I. N. Blusger, J. G. Nel (*three-quarters*) ; J. R. Kingdon, J. D. Wilson (*halves*) ; R. S. Hunt, K. D. Moynagh, E. E. Harris, A. Grant, G. Gray, J. A. V. Nicoll, N. B. Mundy, J. C. Newbold (*forwards*).

## ST. BARTHOLOMEW'S HOSPITAL v. GLOUCESTER.

Played at Gloucester on Saturday, October 6th, and lost by 2 goals 4 tries (22 pts.), to 1 goal (5 pts.).

At one time it looked as though we were going to break our sequence of defeats at Gloucester, when a quarter of an hour from the end we led by 5 pts. to 3. Then came the deluge, and during the closing stages we were overrun. Up to this time we had more than held our own, not only in the set scrums, but also in the line-outs, where our pack had been superior, Capper and Mundy being particularly prominent with their fine rushes.

Gloucester scored first from a three-quarter movement, the kick at goal being charged down. Immediately afterwards our three-quarters got going, and K. C. Burrow went clean through and punted over the full-back's head. There was a race for the touch-down and Kingdon got there first. Morison converted. We were getting plenty of the ball from the scrum, but the marking of the Gloucester wing forwards, and the slowness with which the ball came back, prevented any successful attempt at scoring. Nel was very unlucky in not scoring after a very fine run. In the last quarter Gloucester succeeded in getting their share of the ball, and their halves and backs, who showed a perfect understanding of each other's play, were much too good for us. Tries were scored for them by Watkins, Edwards, Hordern, Tanner and Williams, Boughton converting two. It is a great pity we cracked so badly. We deserved a much better result after the magnificent play of our forwards. If this had been our fifth match, as it was for Gloucester, instead of being, for most of our side, the second, I think the final score would have been far more flattering.

*Team.*—C. R. Morison (*back*) ; J. G. Youngman, K. C. Burrow, A. W. Little, J. G. Nel (*three-quarters*) ; J. R. Kingdon, J. D. Wilson (*halves*) ; P. D. Swinstead, K. D. Moynagh, E. M. Darmady, G. Gray, A. H. Grant, R. Mundy, W. M. Capper, J. C. Newbold (*forwards*).

## COLLEGE APPEAL FUND.

## SUBSCRIPTIONS TO DATE.

	f.	s.	d.	*
Staff . . . . .	12,677	15	10	(72)
Demonstrators . . . . .	1,716	11	0	(69)
Students . . . . .	765	6	5	(287)
Old Bart.'s men:				†
Bedfordshire . . . . .	25	3	6	(7)
Berkshire . . . . .	123	3	0	(16)
Buckinghamshire . . . . .	76	19	0	(14)
Cambridgeshire . . . . .	183	6	0	(17)
Cheshire . . . . .	6	16	6	(3)
Cornwall . . . . .	31	11	0	(8)
Cumberland . . . . .	5	0	0	(1)
Derbyshire . . . . .	19	14	0	(4)
Devonshire . . . . .	558	15	0	(52)
Dorset . . . . .	52	1	0	(14)
Durham . . . . .	17	7	0	(4)
Essex . . . . .	253	2	6	(20)
Gloucestershire . . . . .	228	18	6	(23)
Hampshire . . . . .	446	14	0	(46)
Herefordshire . . . . .	17	12	0	(4)
Hertfordshire . . . . .	84	11	0	(16)
Huntingdonshire . . . . .				{1}
Isle of Wight . . . . .	181	13	0	(12)
Kent . . . . .	575	15	0	(69)
Lancashire . . . . .	91	4	6	(12)
Leicestershire . . . . .	136	15	0	(7)
Lincolnshire . . . . .	58	17	0	(17)
Middlesex . . . . .	385	6	0	(21)
Norfolk . . . . .	167	15	6	(21)
Northamptonshire . . . . .	59	4	0	(5)
Northumberland . . . . .	101	1	0	(2)
Nottinghamshire . . . . .	19	19	0	(3)
Oxfordshire . . . . .	185	3	0	(18)
Rutland . . . . .				(2)
Shropshire . . . . .	35	9	0	(8)
Somersetshire . . . . .	1,148	13	0	(28)
Staffordshire . . . . .	193	17	0	(5)
Suffolk . . . . .	292	8	6	(20)
Surrey . . . . .	467	18	6	(54)
Sussex . . . . .	410	1	6	(59)
Warwickshire . . . . .	179	2	6	(19)
Westmorland . . . . .	2	10	0	(1)
Wiltshire . . . . .	110	11	0	(12)
Worcestershire . . . . .	158	19	6	(24)
Yorkshire . . . . .	302	6	6	(24)
Wales . . . . .	60	8	0	(15)
London . . . . .	2,885	13	8	(193)
Channel Islands . . . . .	20	0	0	(2)
Scotland . . . . .	15	5	0	(5)
Abroad . . . . .	61	11	0	(12)
South Africa . . . . .	362	15	6	(19)
Canada . . . . .	114	3	6	(8)
East Africa . . . . .	87	12	0	(10)
West Africa . . . . .	146	10	0	(5)
India . . . . .	201	0	0	(11)
Ireland . . . . .	19	14	0	(4)
North Africa . . . . .	1	0	0	(1)
North Borneo . . . . .	5	5	0	(1)
Australia . . . . .	122	2	0	(6)
China . . . . .	52	8	4	(9)
Siam . . . . .	10	0	0	(1)
France . . . . .	50	0	0	(1)
British West Indies . . . . .	50	8	0	(5)
Straits Settlements . . . . .	7	1	0	(3)
New Zealand . . . . .	6	1	0	(3)
Services . . . . .	571	17	6	(43)
Others . . . . .	32,342	7	5	(328)
Lord Mayor's Appeal . . . . .	11,052	2	0	
Funds of College . . . . .	8,000	0	0	
Value of Building . . . . .	20,000	0	0	
	£98,800	2	2	

\* Number of Bart.'s men subscribing. † Number of Bart.'s men in County. ‡ Counties with Secretaries.

## REVIEWS.

**RECENT ADVANCES IN PATHOLOGY.** By GEOFFREY HADFIELD and L. P. GARROD. 2nd edition. (London: J. & A. Churchill, Ltd., 1934.) Pp. xii + 457. 69 illustrations. Price 15s.

To attempt to give an account of only the more important advances in such a subject as pathology is a formidable task. To be concise, and at the same time to cover the large field that recent research has explored would seem impossible. The authors of this invaluable work have achieved this and have succeeded in imparting attention to the subject.

Of course, it is not to be expected that every subject dealt with in a text-book should receive attention in such a work as this, but a large variety of the problems clarified or solved during the past few years are surveyed in detail. Each section is a comprehensive essay on the present accepted views on each condition rather than a mere catalogue of workers and their results.

Each subject is so well treated that it is difficult to name any single chapter for special notice or commendation. Though it makes dull reading a list of the conditions examined will give a very fair idea of the scope of the work. The reticulo-endothelial system and its functions; experimental research in such matters as tissue growth and tumour transplantation in their relation to the problem of cancer, with a chapter on therapeutics; the deficiency diseases; endocarditis and the arterial diseases; pneumonia, primary lung cancer, the pneumoconioses; peptic ulcer, the relation of gastric function and anaemia, liver disease, diabetes; Bright's disease; the glioma, encephalitis; the endocrine diseases (thyroid parathyroid, adrenal and pituitary).

It will be seen that each condition is one that has received much attention recently, and each is so adequately explained that one marvels that so much can be condensed into the space of less than 500 pages of comfortable type.

The changes in the second edition comprise re-writing, re-arrangement and the addition of much new material in the chapters on the liver, the vitamins, Bright's disease, cancer and tumour growth, lung diseases (silicosis and lung cancer), and the endocrines (Addison's disease and pituitary diseases). In the chapter on gastric function there is included a most clear and interesting account of the anaemias.

In appearance and size the book is the same.

That it is already most popular is evidenced by the book's almost constant appearance under the final-year student's arm. It is stimulating and instructive alike to student, practitioner and research worker, and we congratulate the authors and the publishers on the excellence of the whole production.

**GREEN'S MANUAL OF PATHOLOGY.** Fifteenth edition. Revised by H. W. C. VINES, M.A., M.D., Pathologist to Charing Cross Hospital. (London: Baillière, Tindall & Cox, 1934.) Pp. xii + 928. 8 coloured plates. Figs. 425. Price 25s.

The re-writing of this well-known book has certainly been ably done by Dr. Vines and the addition of over one hundred and fifty new illustrations has added to its value. It still remains essentially a text-book for the student and is not intended for advanced workers. But as a manual of pathology it will no doubt continue to find even more friends than in the past. The text is good and the replacement of many of the old illustrations by photographs is an improvement. It is to be hoped, however, that the book will be shortened rather than lengthened in the future, because it tends towards the bulky side.

The additional chapters in this edition concern avitaminosis, diseases of the ductless glands, generative tract and breast, and in the last of these the subject of carcinoma is clearly discussed. As in the remainder of the book, the author deals largely with pathological features, but at times, in other parts, there would seem a lack of co-ordination between clinical and pathological phenomena, which, after all, are interdependent.

The section of the book on parasitology is extremely good and the earlier part of the work on general pathology gives an excellent introduction to the general principles of the subject. In the sections on diseases of special tissues and organs, however, it seems a pity in diseases of the kidney that the author adopts Russell's classification of chronic nephritis, which, though intelligible to a pathologist, is beset with difficulties for the beginner. For the rest, the book maintains its old form, and is a readable and up-to-date representation of the subject, which it has taught to countless medical students in the course of the sixty years since it first appeared.

**EARLY FORERUNNERS OF MAN.** By W. B. LE GROS CLARK, D.Sc., F.R.C.S. (London: Baillière, Tindall & Cox, 1934.) Pp. xvi + 295. 89 figures. Price 15s.

The author of this distinguished contribution to anatomical science occupied the Chair of Anatomy in this College for some years. His former students will be pleased that those labours carried on during his sojourn at Bart.'s have culminated in this splendid book.

Man, zoologically, is a primate. The Primates comprise a basal stock of lemurs, the New World platyrhine monkeys, the Old World catarrhine monkeys, the great apes and Man. The great apes present so many resemblances to man that it is customary to assume that they are both descended from the same common ancestor.

This broad outline covers a great number of problems. Since the lemurs are the most primitive group they necessarily relate the members of the order to the common mammalian stock, and so we find among them some which resemble rodents and others tree-shrews. Thus it might be surmised that controversy would occur as to the right of admission or exclusion from the Primates at this level. The author sets out the anatomical reasons why the Tupaiidae (tree shrews) should be given Primate status, and there is no doubt that he is right in this. Some anatomists would cast out the lemur, but again Le Gros Clark would retain them. The most interesting creature amongst the lemurs is the rare *Tarsius*. This inhabitant of Borneo presents so many anthropoid characters that some anatomists have elevated this animal, about the size of a kitten, to full membership of the Anthropoidea. On the other hand, if he is to be retained as a member of the lemurs, then all the other so-called lemurs must be given a reduced status.

Such problems as these can only be argued and settled by an appeal to the details of anatomy. Le Gros Clark's own researches on the cerebral cortex and the thalamus, the visual system, especially the lateral geniculate body, and his first-hand observations in the Far East of the habits of *Tarsius*, *Tupaia*, and other forms, establish his authority for the judgments he passes.

In contrast to those who stress so emphatically the close relationship between the chimpanzee-gorilla stock and man as to make the latter almost a direct descendant of the former, there are others who insist on the differences between them, and even go so far as to deny any close genetic relationship between them. Such anatomists dwell on the cerebral disparity between Man and these great apes, the differences in hair growth and direction, the differences in limb proportions, mode of progression, and the shape, usage and arrangement of the digits, etc. The most extreme statement of these differences has ended in a denial of Man's relationship with the apes, and would explain by parallelism and convergence what similarities do exist. Since an ancestor for Man has to be found recourse is had to *Tarsius*—the tiny lemuroid form that has so many anthropoid characters. Man, as well as the Anthropoidea, then, is assumed to have come from some large extinct *Tarsioid*.

Naturally *Early Forerunners* has to answer this view, and the evidence presented soon persuades one that there are not sufficient reasons for departing from the orthodox view that Man and the existing great apes are descended from a common ancestor which, by all the usual criteria, would be esteemed an anthropoid ape.

The reader of this fascinating book soon realizes that he is being conducted through a difficult and complex anatomical territory by one who is master of the subject, and it is this very mastery of the subject which makes the book always lucid and interesting.

The mastery of the anatomy of the human body which the medical student acquires enables him to appreciate the full force of the arguments advanced, and to enjoy this book in a way no other student of biology can, for these do not acquire the necessary anatomical knowledge.

Everyone who felt an interest in the origin and form of the human body would thoroughly enjoy this book.

**ABSCESS OF THE BRAIN.** By E. MILES ATKINSON, M.B., F.R.C.S. (Medical Publications, Ltd.) Pp. x + 289. Illustrated. Price 21s.

The strides which have been made in the surgery of intracranial tumours during recent years have been recorded in a large number of books and papers, but comprehensive accounts of the pathology, diagnosis and treatment of brain abscess are few and unsatisfying. It is therefore a pleasure to meet with a book which gives in clear and simple language a straightforward description of intracranial suppuration, and makes an honest attempt to give the reader helpful guidance in the many problems presented thereby.

Mr. Atkinson writes with the conviction of one who has studied his clinical material thoroughly, and has given much thought to the correlation of clinical phenomena with the underlying pathological

processes. His detailed description of the anatomical relationships of the ear to the neighbouring parts of the cerebrum and cerebellum leads naturally to the consideration of the exact mode of spread of infection through the bone, through the membranes and into the brain substance, and he stresses particularly the localization of adjacent brain abscess to the avascular subcortical zone.

The chapters dealing with signs and symptoms give a careful analysis of the clinical picture in the acute, subacute and chronic types of abscess, and are particularly valuable because they focus attention upon indications for operation and guides to prognosis. The indefinite nature of the signs and symptoms at the time when operation is most urgently required is emphasized, and a strong plea is made for repeated lumbar puncture and ventricular puncture, because of the confirmatory evidence obtainable from examination of the cerebro-spinal fluid.

Mr. Atkinson brings forward strong arguments in favour of approaching temporal and cerebellar abscesses through the infected ear, and he rightly regards the treatment of such abscesses as primarily an otological and then a neurological problem. His description of the delicacy of technique required in dealing with cerebral tissue and his views on the material to be employed for drainage leave nothing to be desired, and his advice with regard to personal attention to after-treatment, avoidance of meddlesome manipulation of drainage-tubes and prolonged drainage is admirable. We feel, however, that he might proceed profitably even further along the same lines and never remove a tube which has to be replaced, and that he might well abandon even the gentlest irrigation of an abscess cavity.

Though a book which will repay perusal even by the most expert, it is so clearly written and illustrated that it is suitable for the use of M.B. students as well as for the aspirants to higher distinctions in surgery.

## CORRESPONDENCE.

### CUTTING WARDS AND OPERATION THEATRES.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR.—I was very interested in the paper on "Cutting Wards and Operation Theatres" by Prof. Gask, which appeared in your last issue.

I would like to suggest that the custom of exhibiting the stones "taken out of patients' bladders that are cut within this hospital" in the counting-house was followed as a means of keeping the work and activities of the institution, not only before the Governors, but before all those who were supporters of the charity. Presumably at that time most of the subscribers lived in the City, and not very far from the Hospital, and as cheques were not in use, in all probability they would make a practice of calling at the counting-house to pay over their subscriptions in person. I can imagine that the energetic office staff would take a delight in doing a little propaganda work by pointing out the ever-increasing collection of stones as a record of the continued activity of the institution.

Prof. Gask also mentions that it was necessary to have the operation area railed off to prevent the press of spectators from crowding too closely about the surgeon. I believe that it was not unusual for operations to be considered more or less of a fashionable spectacle. Even in my time I remember that lay visitors were occasionally brought into the old operating theatre at the Royal Infirmary in this city, where they joined the considerable number of medical men who dropped in, not for any particular interest they may have had in the actual cases, but just because it was looked upon as a sort of entertainment to spend the morning in the operating theatre. In fact that old operating theatre was a regular rendezvous, and was quite often crowded with people who came to see each other and to have a talk. In the year 1911 I was present at a series of operations carried out by Prof. Tuffier, in Paris, at the Hospital Beaujon. The theatre was a very large one, but there were no tiers of seats, and we were all just standing crowded round about the table. There must have been two or three dozen people present in the room, and in fact at one time I actually counted sixty spectators, though a good many of them would be students. At the back of the crowd I saw an important-looking, elderly lady, dressed quite fashionably in black, and watching what was going on with the aid of a pair of lorgnettes. I took her to be one of the many lady doctors practising in the gay city, but on inquiry I found she was the Countess —, who had just come in to see what her dear Professor was doing!

Yours faithfully,

Newcastle-upon-Tyne ; Oct. 20th.

G. GREY TURNER.

## CHANGES OF ADDRESS.

BROWNE, Surg.-Cmdr. E. M., R.N., 40, Philbeach Gardens, S.W. 5.

CLEVELAND, J. W., 46, Clarence Road, St. Albans. (Tel. 79.)

CRUMBLE, J. R., 219, Shirley Road, Croydon.

DALE, W. C., Adeoyo Hospital, Ibadan, Nigeria, West Africa.

EVANS, GEOFFREY, 7, Mansfield Street, Portland Place, W. 1. (Tel. Langham 1717.)

FAULDER, T. JEFFERSON, 2, Westland Road, Watford, Herts. (Tel. Watford 4140.)

FEAGAN, R. A., 77, Marlborough Mansions, Cannon Hill, Hampstead, N.W. 6. (Tel. Hampstead 3446.)

HUME, J. B., 61, Harley Street, W. 1. (Tel. Langham 1831.)

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STORRS, W. T., The Storthing, Cliffe Hill, Lewes, Sussex.

WILLIAMS, R. LESTER, 49, Harley Street, W. 1.

## APPOINTMENTS.

ALLNUTT, Lt.-Col. E. B., R.A.M.C., appointed Officer Commanding Military Hospital, Gibraltar.

MELLOWS, P. B. P., L.M.S.S.A., D.T.M.&H., appointed Assistant Medical Officer, Port of London Sanitary Authority, Corporation of the City of London.

## BIRTHS.

GREEN.—On October 1st, 1934, to Sheila (née Hodder), wife of Leslie E. Green, M.R.C.S., L.R.C.P., Eastleigh, Hampshire—a daughter.

KNIGHT.—On September 27th, 1934, at 20, Devonshire Place, W. 1, to Helen Amy (née Swann), wife of Ronald Knight, M.D., of Crawley—a daughter.

PHILLIPS.—On October 7th, 1934, at 20, Devonshire Place, W., to Barbara, wife of Ralph Phillips, M.S., F.R.C.S.—a son (stillborn).

PRICE.—On October 17th, 1934, to Mary, wife of Roy Kemball Price, M.D., of Brighton—a son.

## MARRIAGES.

PHILPS—WOOD-HILL.—On October 6th, 1934, at St. Michael's Church, Beccles, by the Very Rev. Lord Bishop of Southwark, assisted by the Rev. H. L. Birch, M.A., Rector of Beccles, Alan Seymour Philps, elder son of the late Francis John Philps and Mrs. Philps, of Radlett, to Joan, second daughter of Dr. and Mrs. Wood-Hill, Staithes House, Beccles, Suffolk.

Snow—BURTON.—On October 3rd, 1934, at All Saints' Church, Kirkee, India, Capt. James Elliot Snow, only son of the late Mr. P. W. Snow and of Mrs. P. W. Snow, The Gables, Porlock, to Mary Gertrude Isabel, younger daughter of the late Lt.-Col. Henry Gerard Burton (Indian Army) and of Mrs. H. G. Burton.

WINDLE—ABBOTT.—On October 6th, 1934, at All Saints' Church, Hove, by the Rev. T. H. Windle, Reginald Webb Windle, M.D., son of Mr. A. R. Windle, O.B.E., of Redhill, Farnham, Surrey, to Joyce, only daughter of Mr. and Mrs. Willoughby Abbott, of Exton House, Second Avenue, Hove, Sussex, and of Cape Town.

## DEATHS.

BOND.—On October 14th, 1934, at a nursing home, Newton Abbot, Devon, Barnabas Mayston Bond, M.R.C.S., L.R.C.P., aged 73.

LOWE.—On October 21st, 1934, at Clarehaven, Birchington, Walter George Lowe, M.D., F.R.C.S., formerly of Burton-on-Trent, aged 86.

## NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, ST. BARTHOLOMEW'S HOSPITAL, E.C. 1.

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., at the Hospital.

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, The Journal Office, ST. BARTHOLOMEW'S HOSPITAL, E.C. 1. Telephone: National 4444.